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## A New Species of *Minasia* (Asteraceae, Vernonieae) from the Planalto de Diamantina, Minas Gerais, Brazil

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**ABSTRACT.** A new species of *Minasia* (Asteraceae, Vernonieae) was found in the “campos rupestres” of the Planalto de Diamantina, Minas Gerais, Brazil. *Minasia lewinsohnii* is characterized by its overall small size, linear to elliptical subfleshy leaves, sessile to pedunculate capitula, and achenes with indumentum throughout the surface. So far, it is known from only one population.

**Key words:** Asteraceae, Brazil, *Minasia*, Vernonieae.

*Minasia* H. Robinson (Asteraceae, Vernonieae) was recently established by Robinson (1992), who created the genus based on two species previously described as belonging to *Vernonia* Schreber and established another new species. According to Robinson (1992, 1995, 1996, 1999), the genus currently includes five species: *M. alpestris* (Gardner) H. Robinson, *M. scapigera* H. Robinson, *M. pereirae* H. Robinson, *M. splettiae* H. Robinson, and *M. cabralensis* H. Robinson.

*Minasia* species are endemic to the campos rupestres of the Espinhaço Range in Minas Gerais, Brazil. More specifically, they occur in the high-altitude areas ranging from the Serra do Cipó to the Planalto de Diamantina, as well as in the isolated western extension of the campos rupestres in Minas Gerais, the Serra do Cabral. The campos rupestres have an immense diversity of species, many of which are endemic (Giulietti & Pirani, 1988). They are considered to present the greatest degree of endemism among Brazilian vegetation types (Joly, 1970). Therefore, finding a new species in these environments is not surprising.

Recent collecting trips were conducted by faculty of the Universidade Estadual de Campinas for taxonomic, genetic, and ecological studies on the interactions between Asteraceae and phytophagous insects. During those trips, a new, seemingly micro-endemic species of *Minasia* was found in the Plan-

alto de Diamantina. This region seems to be the one with the greatest diversity of *Minasia* species, with four of the five previously described species occurring there (*M. alpestris*, *M. scapigera*, *M. pereirae*, and *M. splettiae*), in addition to the new species proposed here.

***Minasia lewinsohnii*** J. Semir & F. F. Jesus, sp. nov. TYPE: Brazil. Minas Gerais: Diamantina, Estrada Guinda–São João da Chapada, campo arenoso com cascalho quartzítico, 18°09.59'S, 43°43.00'W, 7 Sep. 1996 (fl, fr), T. M. Lewinsohn, P. I. Prado, A. J. Santos & J. C. Silva in PIC96696 (holotype, UEC; isotypes, K, MO, R, SPF, UEC, US). Figure 1.

Haec species *Minasiae cabralensis* capitulis interdum pedunculatis similis, sed ab ea habitu brevior, laminis foliorum minoribus carnosisque, pedunculis brevioribus et achenia omnino indumento obiecta differt. Habitu *M. splettiae* appropinquat.

Plant 19–41 cm tall, herbaceous, perennial; stem 1–6 cm tall, obscured by the surrounding leaf sheaths. Leaves forming rosettes, sessile, sheaths ca. 3 mm tall, blades 2–9 × 0.2–0.8 cm, subfleshy, linear to elliptic, apex acute, margin entire; venation pinnate, ascending nerves inconspicuous. Inflorescence scapose, scape 13.5–40 cm tall, 1.7–2.9 mm diam., partially leafy, up to 3 per rosette, few or no branchings at the apical region, 1 to 5 capitula per branch; leaves of the scape sessile, 9.3–26 × 1.8–5.8 mm, ovate-elliptic, apex acute, base enlarged, margin entire. Capitula sessile to pedunculate, peduncles 0.5–1.5 cm long; involucre of the capitulum 7.7–13.7 mm tall, 5.7–13.4 mm wide, with ca. 6 to 8 series of phyllaries; phyllaries 2–6.5 × 1.2–2.3 mm, the most external ovate, the most internal linear, apex acute to acuminate, distally villous as well as on the more lateral portions of the abaxial face, glabrous on the proximal region

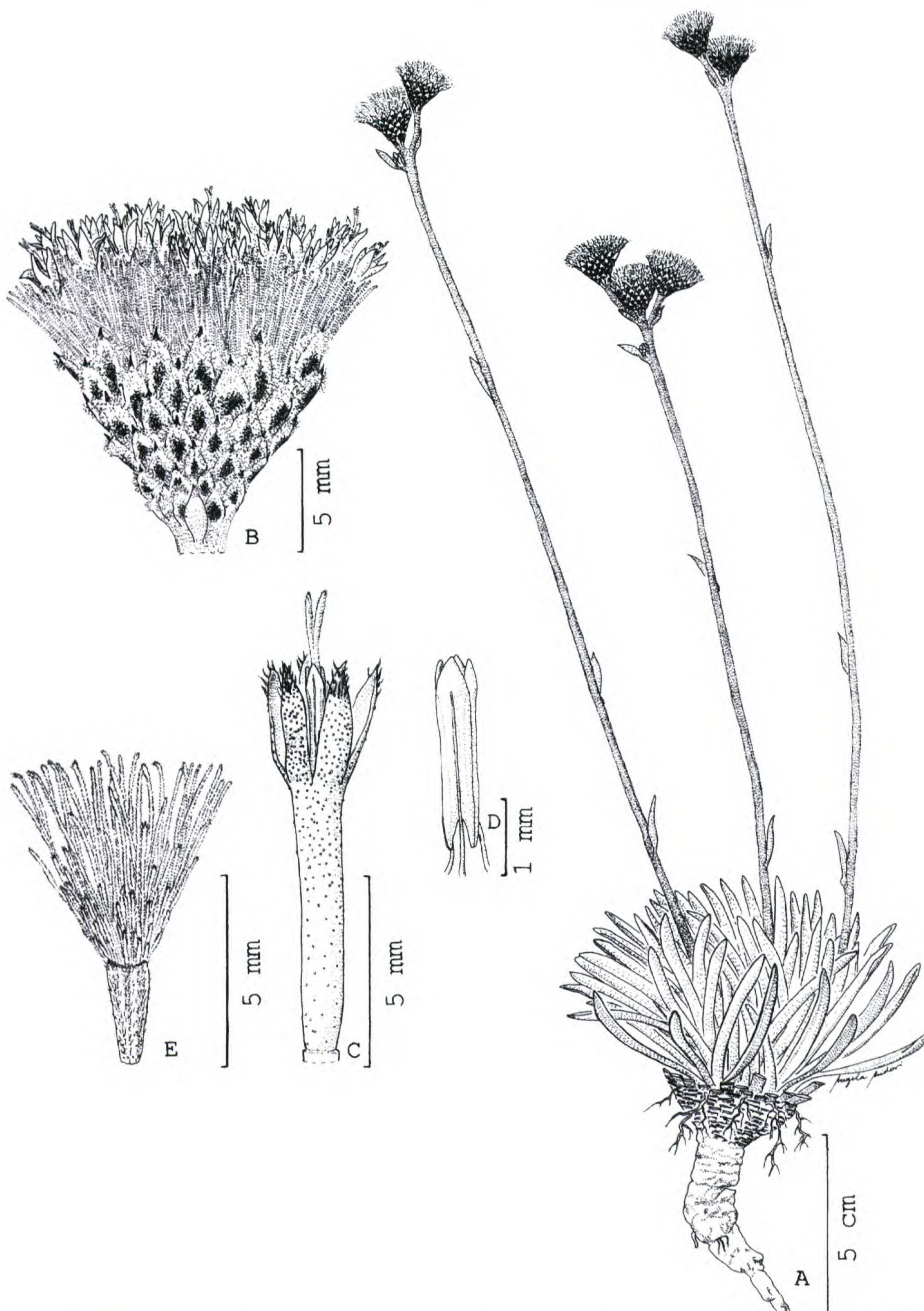


Figure 1. *Minasia lewinsohnii* J. Semir & F. F. Jesus. —A. Habit. —B. Capitulum. —C. Flower. —D. Anthers. —E. Achene with pappus. Drawn from the holotype, PIC96696 (UEC).

of the adaxial face, margin barbellate, purple on the middle, pale on the margins. Flowers 21 to 43 per capitulum; corolla 7.1–10.6 mm long, lavender to magenta, densely glandular-verrucous on the

lobes, sparsely so on the tube, tomentose on the external apex of the lobes, glabrous below; lobes 2.5–3.2 × 0.6–0.8 mm, lanceolate; anthers 2.9–4.2 mm long, tails ca. 0.7 mm long, apical appendages

0.6–1.0 × 0.2–0.3 mm, triangular to sub-lanceolate, apex acute; style ca. 12 mm long. Achene 2.2–3.5 mm long, 0.8–1.5 mm diam., ribbed, ca. 8 ribs, sericeous to setuliferous indumentum, dense to sub-glabrescent throughout the surface, sometimes denser at the base, glandular surface; pappus bristles 0.4–7.5 mm tall, in indistinguishable series, the most external ones gradually shorter, lavender to magenta, barbellate.

The species is comparable in general size—both of rosette and inflorescence—to *Minasia pereirae* and *M. splettiae*. In inflorescence height it is also comparable to *M. cabralensis*; however, the rosette leaves are shorter in *M. lewinsohnii* (up to 9 cm long) than in *M. cabralensis* (10–16 cm long), giving *M. lewinsohnii* the appearance of an overall smaller plant. *Minasia lewinsohnii* is much smaller than *M. alpestris* and *M. scapigera*, both of which can be up to 1 m tall. In addition to the difference in general size, the leaves in *M. lewinsohnii* are linear to elliptical, not oblanceolate as in *M. alpestris*, and the inflorescence is not congested like the one in *M. scapigera*.

The capitula in this new species may be pedunculate, as they generally are in *Minasia cabralensis*, but very rarely in the other species of the genus. However, the peduncles are much shorter in *M. lewinsohnii* than in *M. cabralensis* (up to 1.5 cm vs. up to 35 cm long). Also, the achene in *M. lewinsohnii* has indumentum throughout the surface, whereas in *M. cabralensis* the achene is distally glabrous (Robinson, 1996). Furthermore, the leaves are shorter and more fleshy in *M. lewinsohnii* than in *M. cabralensis*. To date, *M. cabralensis* seems to be restricted to the Serra do Cabral while *M. lewinsohnii* has been found only in the Planalto de Diamantina. *Minasia lewinsohnii* differs from *M. splettiae* in having wider and thicker leaves and from *M. pereirae* in having linear to elliptic rather than oblanceolate leaves.

To date, *Minasia lewinsohnii* is known only from one population, in the Planalto de Diamantina, oc-

curing on sand. The species is named in honor of Thomas Lewinsohn (Departamento de Zoologia, Universidade Estadual de Campinas), one of the first collectors of this population.

*Paratypes.* BRAZIL. **Minas Gerais:** Diamantina, Estrada Guinda–S. João da Chapada, 18°09.58'S, 43°42.96'W, 23 June 2000 (fl, fr), K. S. Yotoko et al. KSY-00/112 (BHCB, UEC), 29 Apr. 1997, T. M. Lewinsohn et al. in PIC97032 (MBM, SP, UEC).

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#### Literature Cited

- Giulietti, A. M. & J. R. Pirani. 1988. Patterns of geographic distribution of some plant species from the Espinhaço Range, Minas Gerais and Bahia, Brazil. Pp. 39–69 in W. R. Heyer & P. E. Vanzolini (editors), Proceedings of a Workshop on Neotropical Distribution Patterns. Academia Brasileira de Ciências, Rio de Janeiro.
- Joly, A. B. 1970. *Conheça a Vegetação Brasileira*. EDUSP & Polígono, São Paulo.
- Robinson, H. 1992. Notes on Lychnophorinae from Minas Gerais, Brazil, a synopsis of *Lychnophoriopsis* Schultz-Bip., and the new genera *Anteremanthus* and *Minasia* (Vernonieae: Asteraceae). Proc. Biol. Soc. Wash. 105: 640–652.
- . 1995. New combinations and new species in American Vernonieae (Asteraceae). Phytologia 78: 384–399.
- . 1996. A new species of *Minasia* from the Serra do Cabral, Minas Gerais, Brazil (Vernonieae: Asteraceae). Phytologia 80: 350–351.
- . 1999. Generic and subtribal classification of American Vernonieae. Smithsonian Contr. Bot. 89.